

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND

ASSURANCE COMPANY OF AMERICA :
and RICK DANSEY, :
Plaintiffs :

v. :

Civil No. AMD 05-1301

YORK INTERNATIONAL, INC., :
DAVID W. DEWITT, and GREGORY D. :
MORTIMER PROPERTIES, INC., :
Defendants :

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MEMORANDUM OPINION

This is a diversity strict products liability action arising under Maryland law in respect to an allegedly defective and negligently-installed and -maintained residential furnace. Plaintiffs Assurance Company of America and Rick Dansey seek, by way of their 15-count amended complaint, compensatory damages for pecuniary and property loss against defendants York International, Inc., the furnace manufacturer; Gregory D. Mortimer Properties, Inc., a homebuilder; and David W. DeWitt, the subcontractor who installed the furnace. Plaintiffs' losses resulted from a fire at a home under construction. Now pending and exhaustively briefed, *inter alia*, are cross-motions for summary judgment. A hearing is not needed. For the reasons stated within, plaintiffs having failed to project substantial probative evidence that any one or more of defendants were at fault for the fire, defendants' motions shall be granted. *See* Fed.R.Civ.P. 56.

I.

A.

On November 17, 2004, there was a fire at Dansey's vacation home in Western Maryland. The house was under construction at the time of the fire; it was substantially completed. Two furnaces manufactured by York had been installed in the house on or about August 15, 2004. *DeWitt Depo., York Exh. D, pg. 18*. One furnace serviced the first and second levels of the home; the other furnace serviced the basement. *Ebersole Depo., York Exh. C, at 141-42*. Both furnaces were installed in a basement utility room. *Id.*

It is undisputed that construction workers employed by Mortimer (the builder) were using the furnaces to warm the partially completed residence to control the temperature inside the house for dry-walling and wood finishing in the days before the fire, *Mortimer Depo., York Exh. E, at 29, 40-41*, notwithstanding a caution in the York manual that the furnaces should not be operated under such conditions. In particular, there is evidence that on the day before the fire, the furnace servicing the basement ran "constantly," *Sphar Depo., York Exh. G, at 9, 11-13*, but plaintiffs' theory is that it was a defect in the other furnace that was the cause of the fire.

B.

"The elements of proof [in a strict products liability case] are the same whether the claim [is] characterized as one for strict liability or negligence . . . or breach of warranty." *Watson v. Sunbeam Corp.*, 816 F.Supp. 384, 387 n. 3 (D.Md.1993) (internal citations omitted); see *Ford Motor Co. v. General Accident Ins. Co.*, 365 Md. 321, 779 A.2d 362, 369-

70 (2001). While plaintiffs assert numerous theories of liability, the gravamen of all their theories is that the fire was caused when, as a result of a clogged furnace filter (which plaintiffs posit was itself caused by “construction debris” such as wood dust from cutting operations), the operating temperature in the furnace rose so high that one of the polymer components of the furnace ignited. To support these allegations, plaintiffs rely on the expert opinion testimony of two engineers, Dale Cagwin and Daryl Ebersole, both of Robson Forensic, Inc.

Plaintiffs’ expert opinion testimony is based on the assumption that the use of the furnace during the home’s construction, in violation of York’s instructions, led to the clogging of the air filter because of dirt build-up. *Cagwin Depo., York Exh. B, at 85*. According to this theory, the clogged filter resulted in a rise in the operating temperature of the combustion gas system. *Id.* They then opine (without a scintilla of evidence) that the high temperature limit switch failed to shut down the furnace because of a defect or improper placement. *Id.* at 86. As a result of the failure to shut down the furnace, the gas became so hot that a polymer component was ignited in the gas system. *Id.*

The furnace has various safety devices in addition to the high temperature limit switch, including a rollout switch and a pressure switch. The rollout switch is another temperature sensing switch that monitors the temperature of the burner box and is designed to shut down the furnace should its temperature rise above the set-point, which is several hundreds of degrees Fahrenheit below the ignition point of the available polymer components. Also, the pressure switch is designed to monitor the integrity of the closed

combustion air system and will detect a drop in pressure if, for example, the induced draft fan stops working.

Defendants attack the plausibility and the very reliability (and thus the admissibility) of the plaintiffs' expert opinion evidence, which is unsupported by any testing, and which is admittedly based on critical factual assumptions. For their part, defendants assert that the furnace was actually consumed by the fire, which they assert originated somewhere in the partially completed residence. In particular, York's expert has conducted extensive laboratory testing, *inter alia*, of the plaintiffs' "clogged-filter" hypothesis, on a furnace of essentially identical manufacture, blocking the furnace filter with piles of sawdust; in such testing, the furnace operating temperature could not be increased above the designated range.

II.

In addition to breach of contract and breach of warranty claims against DeWitt, the installer, which hinge on the presence of a defect in the furnace or a negligent installation of the furnace (as to the latter of which there is no evidence, plaintiffs seemingly having abandoned the negligent installation theory), plaintiffs assert a simple common law negligence claim against DeWitt as well. In this claim, plaintiffs assert DeWitt breached a duty to prevent Mortimer's employees from using the furnace while the home was under construction. This claim is rejected as a matter of law; DeWitt had no such duty under Maryland law (or industry standards) and plaintiffs have not cited any support (apart from the bald allegation of their expert) for this claim. *Cf. Lamb v. Hopkins*, 303 Md. 236, 241-242 (1985).

III.

A.

Federal Rule of Evidence 702 provides for the admission of expert testimony:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

The rule reflects the Supreme Court's earlier elucidation of the process by which expert testimony should be evaluated in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 592-93 (1993). A trial court must make a "preliminary assessment of whether the reasoning or methodology underlying the scientific testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue."¹ The Court in *Daubert* identified several factors that a judge may consider in making this "preliminary assessment:" (1) whether a theory or technique can be or has been tested; (2) whether it has been subjected to peer review and publication; (3) whether a technique has a high known or potential rate of error and whether there are standards controlling its operation; and (4) whether the theory or technique enjoys general acceptance within a relevant scientific community. *Id.*

¹Although the Court in *Daubert* dealt with purely scientific testimony, engineering expert testimony is analyzed under the same standards. See *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 141 (1999).

Defendants point repeatedly to plaintiffs' experts' failure to test the clogged-filter theory. Indeed, the Supreme Court has said that testing is a key factor in determining the reliability of expert testimony. *See id.* at 593. This lack of testing has been held to be enough to exclude testimony. *See, e.g., Truck Ins. Exch. v. MagneTek, Inc.*, 360 F.3d 1206, 1212 (10th Cir. 2004)(expert testimony excluded in a fire case where, *inter alia*, causation hypothesis had not been subjected to sufficient testing); *Pride v. BIC Corp.*, 218 F.3d 566, 578, 580-81 (6th Cir. 2000)(summary judgment granted on behalf of defendant where plaintiffs' experts' opinions that cigarette lighter caused fatal fire due to certain design and manufacturing defects either not tested or not supported by reliable testing); *Shreve v. Sears, Roebuck & Co.*, 166 F. Supp. 2d 378, 398 (D. Md. 2001) (expert testimony excluded in a case where, *inter alia*, expert failed to test his theory of a defect in a snow blower).

In contrast, defendant York offers the results of testing by its expert, Charles Manning, who reliably opines that the furnace was consumed by, rather than the cause of, the fire, and that, in particular, the "clogged-filter" theory, to which plaintiffs' experts shifted late in the discovery phase of the case, is deeply flawed and, indeed, "false." *See Manning Depo., York Exh. F, at 55, 58, 67-68; Supp. Report of Dr. Manning.* Manning conducted experiments in which a fire started within the furnace and in which the furnace filter was intentionally clogged.² Apart from Manning's demonstration, by clear and convincing

²Dr. Manning's testing of the "clogged-filter" theory took place after summary judgment practice had commenced as a result of plaintiffs' experts' eleventh hour shift in their theories of liability. After his later testing, York proffered him for deposition but plaintiffs chose not to accept the offer.

(continued...)

evidence, that the operating temperature of the furnace could not remotely have reached the ignition point of the polymer components as a result of a “clogged-filter,” he also concluded that the polymer components in the upper compartment of the subject furnace had been melted, which suggests an exterior fire, rather than total destruction by an interior fire as Cagwin and Ebersole’s theorized. *Id. at 115-117*. Additionally, Manning’s testing found that regardless of how the fire started, an interior fire would result in arcing and similar damage that was not found in the furnace at issue. *Id. at 54-55*. Cagwin and Ebersole have not met these contentions with reliable counter-testing or otherwise.

Plaintiffs’ expert opinion testimony fails to comport with other applicable factors under *Daubert* and Rule 702. There has been no peer review or publication of the “clogged-filter” theory advanced by plaintiffs, or the general idea that restricted airflow can lead to auto-ignition (factor one). As a result, there is no way to know whether it is a “generally accepted” theory (factor four).³

²(...continued)

Plaintiffs complain strenuously about defendants’ alleged dilatory tactics, but plaintiffs have sought delays in the progress of the case every bit as much as have defendants. Indeed, the fire in this case occurred in November 2004, and plaintiffs filed suit barely six months later, hardly enough time, it would seem, to conduct a careful investigation into its cause and origin. Moreover, plaintiffs greatly expanded their claims when they sought and obtained from the court leave to file their amended complaint more than a year after they filed their original complaint. Accordingly, neither side has a legitimate complaint about the progress of the case or the pace and timing of discovery.

³The third factor “whether a technique has a high known or potential rate of error and whether there are standards controlling its operation” is not applicable here.

Plaintiffs argue that the disagreements about whether their theory reflects what actually happened should be resolved by a jury. They cite *Tunnell v. Ford Motor Co.*, 330 F. Supp. 2d 707, 712 (W.D. Va. 2004) (“Ultimately, the question of the origin and cause of this fire are for the jury to decide based on all of the theories that have any basis in fact.”). But, the disagreement here is not just *whether* the fire originated in the furnace, which one might call a factual question properly argued on the basis of competing expert opinions, but rather if it is, from the point of view of accepted engineering and investigative methodologies, *possible at all* that the fire started in the furnace. The parties agree that a furnace with decreased airflow, e.g., with a clogged air filter,⁴ will cause a rise in operating temperature.⁵ But, defendants correctly note, plaintiffs cannot establish that, as a result of a clogged filter, the furnace can get hot enough to auto-ignite internal polymer components.

⁴Obviously, the “clogged-filter” theory requires evidence beyond the merely speculative that the filter was actually clogged; plaintiffs cannot show that the filter was actually clogged or, assuming that it was, to what extent. There is no evidence of dust or dirt build-up on either furnace. *Cagwin Depo., York Exh. B, at 85, 101*. Additionally, the furnace that is most likely to have been clogged, the basement furnace, as a result continuous running, is not the furnace that allegedly started the fire, the furnace heating the first and second floors. *See Sphar Depo., York’s Exh. G, at 11-13*. Similarly, plaintiffs lack any affirmative evidence that the high temperature limit switch was defective; nor does their theory explain how or if the other temperature sensing safety devices failed. Plaintiffs’ experts essentially suggest that because there was a fire, the switch must have failed. They came to this conclusion without disassembling the switch or testing it post-fire. *Cagwin Depo., York Exh. B, at 80, 87*. Under the circumstances, there is much force to York’s assertion that plaintiffs hired their experts to find proof that the furnace caused the fire rather than to examine the possible cause and origin of the fire.

⁵Plaintiffs contend that York’s warnings about operating a furnace during home construction support their “clogged-filter” theory. But York’s corporate designee noted in his deposition that the operation of a furnace under these circumstances presents a “parts reliability issue,” not a fire hazard. *Chase Depo., York’s Reply Exh. I, at 7, 36*. Therefore, the warnings, while certainly evidence of improper behavior by Mortimer do not help establish the existence of a risk of an accidental fire at all, let alone through the pathway of plaintiffs’ “clogged-filter” theory.

For the first alleged polymer components of the furnace to auto-ignite, the furnace would have to reach temperatures of at least 850 degrees Fahrenheit.⁶ *Manning Depo., York's Reply Exh. II, at 54*. Plaintiffs' experts cannot establish, and have not even attempted to establish, that under the circumstances here, a rise in temperature of this magnitude is possible. In any event, plaintiffs' experts can point to no instances of a furnace reaching such high temperatures because of a clogged filter, nor can they point to any research that suggests such a scenario is possible.⁷

Notably, under one of the standards in the field of fire investigations, the National Fire Protection Association Standard 921 – Guide for Fire and Explosion Investigations (“NFPA 921”),⁸ establishing that these high temperatures are possible is an important part of determining the cause of this fire. As part of its scientific methodology, NFPA 921 requires establishing an “ignition sequence:”

Before it can be concluded that a particular appliance has caused the fire, it should first be established how the appliance generated sufficient heat

⁶The normal operating combustion air temperature of the furnace was in the 150 to 220 degree Fahrenheit range. *Chase Depo., York's Reply Exh. I, at 55*. Again, there is no evidence that the high temperature limit switch that would shut down the furnace if the designed operating range was exceeded was defective.

⁷Additionally, even if this temperature were possible, Manning noted in his deposition that the polymer materials would have melted long before they ever got hot enough to ignite, *Manning Depo., York's Reply Exh. II, at 135, 161-64*, and that melting would have tripped the furnace's pressure switch. *Id. at 63, 152*. Plaintiffs offer no substantive response to Manning's testimony.

⁸The NFPA 921 has been held to provide a reliable methodology in the investigation of fire origin and cause. *See Truck Ins. Exch.*, 360 F.3d at 1215, n.11; *Tunnell*, 330 F. Supp. at 725. Plaintiffs' experts agree. *Cagwin Depo., York's Reply Exh. III, at 43-44*; *Ebersole Depo., York's Reply Exh. IV, at 45-47*.

energy to cause ignition. The type of appliance will dictate whether this heat is possible under normal operating conditions or as a result of abnormal conditions. The next step is to determine the first material ignited and how ignition took place.

Id. at § 24.4.1.1. The failure to understand how the temperatures could get so high is particularly troubling when considering the reliability of Cagwin and Ebersole's opinions because, as York correctly contends, plaintiffs' experts did not even know the relevant ignition point for the polymer components. *See Cagwin Depo., York Exh. B, at 89-90; Ebersole Depo., York Exh. C, at 104.*

The Fourth Circuit affirmed the exclusion of expert opinion testimony in circumstances not unlike those presented here in *Boss v. Nissan North Am., Inc.*, 228 Fed.Appx. 331, 2007 WL 1482013 (4th Cir. May 22, 2007)(unpublished). The plaintiffs brought claims as a result of a car accident. Plaintiffs had four proposed experts, each intending to testify that there was a negligently designed power steering system and that a particle in the power steering fluid lodged in a valve and caused a steering malfunction that led to the accident. *Id.* at *1. The Fourth Circuit affirmed the district court's ruling that the experts' opinions were too speculative because there was no evidence that a particle actually became clogged in the power steering fluid, only that it was possible. *Id.* at *6. Similarly here, plaintiffs cannot establish that the filter was clogged, only that it was possible that it become clogged. The *Boss* Court also noted the lack of testing, which is also lacking here. *Id.*

The *Boss* Court was also troubled by the failure of the experts to rule out other causes of the accident. *Id.* While it is not necessary, of course, that an expert rule out all or even most *possible* causes of an accident to legitimize an opinion, the experts' failure here meaningfully to address that issue, coupled with plaintiffs' deficient showing as to the remaining criteria under Rule 702 and *Daubert* in respect to the "clogged-filter" theory of liability, casts considerable doubt on the reliability of the opinion and the means by which it was derived.

In sum, defendants have carried their burden to show by a preponderance of the evidence that the expert opinion evidence undergirding plaintiffs' "clogged-filter theory so lacks reliability on its merits, and was come at in a manner that is so lacking in reliability, that the theory does not pass muster under Rule 702. Accordingly, defendants' motion to exclude the expert opinion testimony based on the clogged-filter theory shall be granted.

B.

Plaintiffs' fallback position is that even without the expert opinion testimony regarding the "clogged-filter" theory, they should be able to show, through the "indeterminate defect" theory of liability available in some strict products liability cases arising under Maryland law, that a defect existed. This contention is unavailing.

First and indisputably, there was misuse of the furnace; "product misuse" is the centerpiece of plaintiffs' claims against Mortimer and DeWitt. *Plaintiffs' Opposition at 1,*

13-18, 23-24, 27, 31, 37, 38.⁹ But the evidence of “misuse” undercuts a claim of product defect: “[A]n inference of a defect may be drawn from the happening of an accident, where circumstantial evidence tends to eliminate other causes, such as product misuse or alteration.” *Harrison v. Bill Cairns Pontiac of Marlow Heights, Inc.*, 549 A.2d 385, 390 (Md. App. 1988). Here, because there was misuse, the “indeterminate defect” theory is inappropriate.

Second, even apart from the above consideration, the circumstances shown in this record provide scant support for application of the “indeterminate defect” theory of liability. Courts consider five factors in determining whether the doctrine may be employed: (1) expert testimony as to possible causes; (2) whether the accident occurred a short time after the sale of the product; (3) whether there have been like accidents in respect to similar products; (4) the extent to which plaintiff has eliminated other causes of the accident; and (5) whether the type of accident is of the sort that does not happen without a defect. *Id.*

York correctly notes that plaintiffs cannot establish that a majority (if any) of these factors weigh in plaintiffs’ favor. First, without Cagwin and Ebersole (who put all their eggs in the “clogged-filter” basket), plaintiffs have no expert testimony on which to suggest the existence of a defect. Second, although there was a short amount of time between the installation of the furnace and the fire (a few months), it was a significantly longer amount

⁹Mortimer’s employees were certainly guilty of “product misuse” insofar as they improperly operated the furnace while the Dansey home was still under construction. For the very reasons discussed at length in the opinion, however, plaintiffs have utterly failed to show that such misuse was a *proximate cause* of the fire that damaged the residence.

of time between when the furnace left York's control and the fire. (And, there was admitted misuse in the interim.) Third, plaintiffs have offered no evidence of similar accidents. Fourth, there is evidence that Cagwin and Ebersole did very little to rule out other sources of ignition. *See Cagwin Depo., York's Reply Exh. III, at 93-94* (noting Robson Forensic was hired solely to determine whether the furnace was the cause of the fire). Finally, it is clear that a fire in a home's utility room most certainly can occur without an appliance defect.

Clearly, the "indeterminate defect" doctrine is inappropriate here. *See Shreve*, 166 F. Supp. 2d at 408-09 ("To the extent that a plaintiff's showing on one or more of these factors cuts against these conclusions, then the strength of the inference of a defect weakens and plaintiff risks the entry of summary judgment for defendant).” Accordingly, because the strict products liability claims asserted here involve complex issues of electrical and/or mechanical failure, plaintiffs are required to provide expert support. *See Wood v. Toyota Motor Corp.*, 134 Md. App. 512, 517 (2000) (requiring expert testimony in a case involving an alleged defective automotive air bag because the issue was “beyond the ken of the average layman.” [sic]). As they are unable to do so, summary judgment in favor of defendants is appropriate.

I V.

Plaintiffs have also filed a claim under the Maryland Consumer Protection Act, *see* Md. Code Ann., Com. Law II § 13-301, et seq. (“CPA”). The CPA prohibits misleading statements that suggest to consumers that a product has a characteristic or is of a certain quality. *Id.* Here, however, defendants correctly contend that an injury arising from a

defective product does not provide a claim under the CPA. *See Sacks v. Philip Morris, Inc.*, 1996 WL 780311, *1 (D. Md. Sept. 19, 1996) (dismissing a CPA claim where victims perished in a house fire started when an allegedly defective cigarette, manufactured by the defendant, ignited a sofa in the decedents' apartment because the cigarettes caused the fire, not the manufacturers' *statements* about them)(emphasis added); *Shreve*, 166 F. Supp. 2d at 417 (rejecting CPA claim based on assertion that "if each Defendant had represented the true nature of the operation of the [defective product]" then plaintiff would not have been injured); *Murphy v. 2001*(same, regarding sale of allegedly defective tampons). Therefore, it is clear that "producing a defectively designed product ... is not a violation of the [CPA]." *Sacks* at *2. The reasoning of these cases is of a piece: every products liability case could become a deceptive trade practices case if such a claim were allowed, *id.*, and there is no indication whatsoever that the Maryland Legislature so intended. Plaintiffs' attempts to distinguish this case from the precedents cited above lack merit and are rejected. York is entitled to judgment as a matter of law as to plaintiffs' CPA claim.

V.

For the reasons set forth above, defendants are entitled to judgment as a matter of law as to all of plaintiffs' claims. An Order follows.

Filed: March 10, 2008

/s/

 Andre M. Davis
 United States District Judge